

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Starnes et al.

Examiner:

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F r: **"ORGANIC THIOL METAL-FREE STABILIZERS AND PLASTICIZERS FOR HALOGEN-CONTAINING POLYMERS"**

Assistant Commissioner for Patents

Washington, D.C. 20231

J1002 U.S. PTO  
09/884306  
06/15/01



INFORMATION DISCLOSURE STATEMENT

Sir:

This invention relates to organic thiol compounds disclosed which can be utilized to plasticize and stabilize halogen-containing polymer compositions, especially poly(vinyl chloride) compositions. Compounds of the present invention are utilized in polymers normally susceptible to deterioration and color change, which typically occurs during processing of the polymer or exposure to certain environments.

As authorized and encouraged under 37 C.F.R. § 1.97 – 1.99, Applicant hereby cites as a means of complying with the duty of disclosure set forth in 37 C.F.R. § 1.56, the following patents and/or documents, copies enclosed, which the Examiner should consider with respect to the above-identified U.S. Patent Application.

US PATENT/DOCUMENT		
PATENT/DOCUMENT NO.	DATE	NAME
3,136,740	June 8, 1964	Klemchuk, et al.
3,503,924	March 31, 1970	Pollock et al.
3,507,827	April 21, 1970	Pollock et al.
3,928,285	December 23, 1975	Gough et al.
4,098,763	July 4, 1978	Starnes, Jr.
4,202,806	May 13, 1980	Yoshida et al.
4,948,827	August 14, 1990	Christidis
5,216,058	June 1, 1993	Visneski
5,414,030	May 9, 1995	Kotani et al.
FOREIGN DOCUMENTS		
EP 0 890 608 A2	January 13, 1999	Europ

EP 0 945 484 A1	September 29, 1999	Europe
WO 99/09094	February 25, 1999	WIPO
<b>ARTICLES</b>		
<p>Abstract from 36 Plastics Manufacturer, Volume 86, 1977 pp. 44-45 entitled "<u>Stabilizers for Chlorine-Containing Resins</u>".</p> <p><u>Stabilization of Poly(vinyl chloride) by Thiols. A Mechanistic Study</u>, Volume 11, No. 2, W. H. Starnes, Jr., I. M. Plitz, D. C. Hische, D. J. Freed, F. C. Schilling, and M. L. Schilling, Bell Laboratories, Murray Hill, New Jersey, pp. 373-382, March-April 1978.</p>		

Copies of the publications are included for the express purpose of providing the Patent and Trademark Office with an ample opportunity to evaluate the same and to arrive at an independent assessment of their materiality, if any, with regard to the examination of the application.

In reviewing the enclosed copies of the above publications, the Examiner is requested to ignore any underscoring or highlighting which may appear because such markings may or may not have any relationship to the subject matter of the above-identified application. The copies being submitted with this Information Disclosure Statement are the best copies available at this time.

An official action considering the enclosed items is earnestly solicited.

Respectfully submitted,

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